(No Model.)

J. TRAVERS.

FIRE ESCAPE.

No. 266,596. Patented Oct. 24, 1882.

Fig. 1.

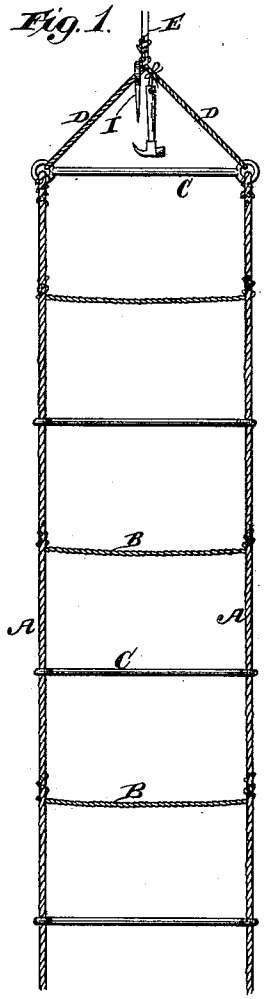


Fig. 2.

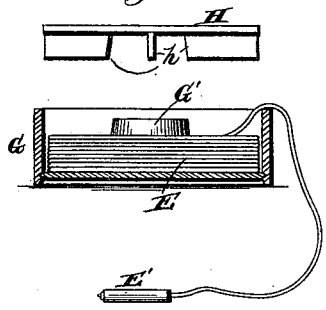


Fig. 3.

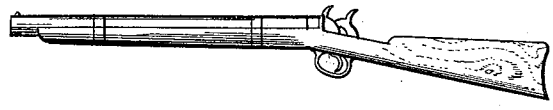


Fig. 4.

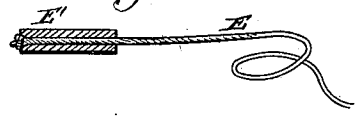


Fig. 5.

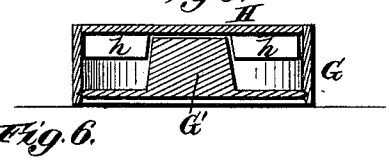
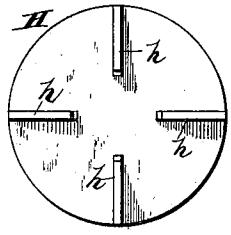


Fig. 6.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN TRAVERS, OF ALBANY, NEW YORK.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 266,596, dated October 24, 1882.

Application filed August 1, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN TRAVERS, a citizen of the United States, residing at Albany, in the county of Albany and State of New York, have invented new and useful Improvements in Fire-Escapes, of which the following is a specification.

The object of this invention is to provide an improved portable fire-escape which can be projected from the ground to any of the windows or to the roof of a building, and then readily secured at its upper end by a person in or on the building, so that the occupants can safely escape, or persons on the outside ascend. This object I attain by constructing a rope ladder, as hereinafter described, and providing it with a life-line carrying a shot or leader, which can be projected from a gun up into any of the windows or onto the roof of a building, so that the rope, after it has been thus projected, can be grasped and the ladder drawn up and secured. In this connection I also provide a receptacle for storing the coiled life-line, in order that it will readily pay off when the shot is fired.

In the annexed drawings, in which my invention is fully illustrated, Figure 1 represents a portion of the ladder. Fig. 2 is a sectional view, representing the case in which the life-line is coiled with the cover for the case detached. Fig. 3 shows a gun for firing the shot attached to one of the terminals of the life-line. Fig. 4 illustrates in section the shot or leader attached to the life-line, a portion only of the latter being shown. Fig. 5 is a vertical central section through the case for containing the life-line with the cover on the case. Fig. 6 is a plan view of the under side of the cover for said case.

The ladder illustrated in Fig. 1 is constructed with strong rope sides A and rounds B, also made of rope and spliced to the said sides. The sides of this ladder are attached at their ends to a stay or spreader, C, consisting of a metal rod provided at its ends with eyes with which the ropes are connected. These stays or spreaders are located at intervals along the ladder, and serve not only to keep its sides apart, but also give sufficient weight to the ladder to steady it and prevent it from swinging while suspended from a building. At that end of the ladder which, when it is suspended, will be the top I attach a pair of ropes, D, to the eyes of the end stay and bring them together, so as to connect with the life-line E. This mode of connection brings the life-line in line with the middle of the ladder, and serves to steady the latter while being drawn up or when suspended by the life-line. This life-line, which may be seventy or one hundred feet in length, as desired, is provided at its free end with an elongated leader or shot, E′, adapted to be loaded into and fired from a gun. In the present instance this shot consists of a metallic cylinder adapted to be placed in the bore of a gun of suitable caliber, and provided with a central bore, in which the free end of the life-line is secured.

The receptacle for the life-line, when it is coiled and not in use, consists of a cylindrical case, G, provided with a central hub, G′, around which the line is coiled. The cover H for this case fits in the latter, and is provided on its under side with the radial ribs or flanges *h*, which fit between the hub and the sides of the case, the ladder folded up, and the whole can then be inclosed in a canvas or other suitable bag or receptacle and one carried by each fire-engine with ease, since the package thus made will occupy but little room.

In completing this fire-escape I propose suspending from rope D or the end of the ladder an eyebolt, I, or staple or analogous device, which can be driven into the floor or other part of the building, so as to anchor the ladder, and I further propose suspending alongside of the bolt a hammer for driving the bolt in case a hammer should not be conveniently near.

In using my escape the shot can be placed in the gun, the cover removed from the case containing the life-line, and the gun then fired so as to project the shot into the window or onto the roof of the building. The life-line will pay out readily, and can be then grasped by the person in or on the building, and the ladder then drawn up and anchored to the eyebolt, which can be readily driven into the building.

It will be seen that while the hammer is simply tied onto the rope, the eyebolt is permanently connected thereto by means of one of the

ropes D passing through the eye of the bolt, and hence the latter will be always ready for use.

I also propose forming turk's-head knots at intervals in the life-line, so that, if desired, the line can be projected up to the roof or other part of the building and used as a man-rope for carrying up hose.

It will be evident that any suitable construction of gun can be employed.

What I claim is—

1. The combination, with the rope fire-escape ladder having a life-line, of the stays C for spreading apart the rope sides of the ladder, substantially as described.

2. The case G for containing the coiled life-line of the herein-described rope fire-escape ladder, said case being constructed with a central hub, G′, and provided with a cover, H, substantially as specified.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN TRAVERS.

Witnesses:
W. B. MELIUS,
THOMAS J. DOLAN.